



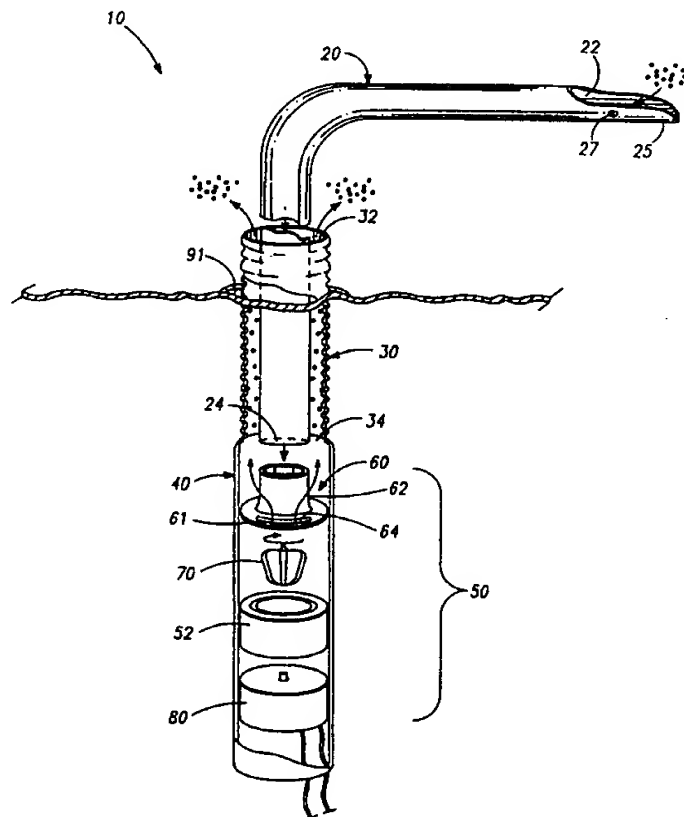
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A61M 1/10		A1	(11) International Publication Number: WO 99/02204
			(43) International Publication Date: 21 January 1999 (21.01.99)
(21) International Application Number: PCT/US97/18674		(74) Agents: DILLAHUNTY, T., Gene et al.; Burns, Doane, Swecker & Mathis, L.L.P., P.O. Box 1404, Alexandria, VA 22313-1404 (US).	
(22) International Filing Date: 14 October 1997 (14.10.97)			
(30) Priority Data: 08/891,456 11 July 1997 (11.07.97) US 08/933,566 19 September 1997 (19.09.97) US		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 08/891,456 (CIP) Filed on 11 July 1997 (11.07.97) US 08/933,566 (CIP) Filed on 19 September 1997 (19.09.97)			
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(54) Title: TRANSPORT PUMP AND ORGAN STABILIZATION APPARATUS INCLUDING RELATED METHODS

(57) Abstract

A surgical pump suitable for bodily fluids, normally blood, usable in the course of surgical interventions as an alternative to the traditional CPB (cardio pulmonary bypass) making use of external blood pumps. It consists of an intake cannula (20) which is inserted with its first (distal) end in a first vessel, an outflow cannula (30) coaxial for some length with, and larger than the first cannula, which is inserted with its first (distal) end in a second vessel, both second ends of the coaxial cannulas being connected with a pump housing (52) having an inlet (62) for the inner cannula and outflow windows (64) for the outer cannula, a rotor impeller (70) housed in the housing and connected with an electric motor (80) rotating coaxially below the pump housing, the housing having inner (56) and outer (59) passageways which allow inflow, change of flow direction (reversal) and outflow of the fluid, thus producing two coaxial counter flowing flows in the coaxial cannulas. The pump can be used making use of a single portal. Inflatable balloons can be used to stabilize the cannulas in situ and to stabilize the walls of the organs or vessels where the cannulas are inserted.



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